

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of) **MAIL STOP AF**
Richard Russell et al.) Group Art Unit: 2621
Application No.: 10/830,222) Examiner: Anand Shashikant Rao
Filed: April 23, 2004) Confirmation No.: 7748
For: METHOD AND APPARATUS FOR)
VIDEO ON DEMAND)

REQUEST FOR RECONSIDERATION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This communication is a full and timely response to the final Office Action dated July 21, 2010. Claims 1-26 and 44-48 remain pending, where claims 4, 5, 9-11, 13, 14, 17, 18, and 27-43 are withdrawn from consideration. Based on the discussion that follows, reconsideration and allowance of the claims are respectfully requested.

Applicants note that the Examiner has not indicated the status of claims 45-48 in the current Office Action. These claims neither are listed on the Office Action Summary nor are they discussed or addressed in the Examiner's Remarks. As a result, Applicants believe that the finality of the October 30, 2009 Office Action is improper, since a clear issue between the Applicants and the Examiner regarding the status of these claims has not been established. See MPEP §706.07

In numbered paragraph 4 on page 2 of the Office Action, claims 1-3, 6-8, 12, 15, 16, 19, 20, 23-26, and 44 are rejected under 35 U.S.C. §103(a) for alleged unpatentability over *Lofgren* (US 6,664,976) in view of *Rhoads* (US 7,099,492) and

further in view of *Jain et al.* (US 7,093,191). Applicants respectfully traverse this rejection.

As discussed previously, exemplary embodiments are directed to a video on demand system. In one example, Fig. 1 illustrates a first platform (e.g. 110) which can capture a stream of video frames and a second platform (e.g. 120) which can determine geo-location data. The geo-location data can be inserted into at least one video frame of the stream to generate a modified video frame. The modified video frame, which includes the geo-location data, is superimposed onto a terrain map of a region of interest. The geo-location data can be based on the geo-location data of a scene in the particular video frame. The geo-location data of the scene can be determined using at least positioning information of the second platform and a distance between a scene in a particular video frame and the second platform. Each superimposed frame in the video stream can be indexed based on the inserted geo-location data and output to a user on-demand.

Applicants claims 1 and 20 broadly encompass the foregoing features. For example, claim 1 recites the following:

A method for processing and outputting video frames comprising:
receiving a stream of video frames from a first platform;
receiving first geo-location data from a second platform;
inserting the geo-location data into at least one received video frame to generate a stream containing modified video frames;
superimposing at least one of the modified video frames onto a terrain map of a region of interest wherein objects within the at least one modified video frame are portrayed on a corresponding geo-location in the terrain map; and

outputting at least one frame in the stream of superimposed modified video frames based on the inserted geo-location data.

Applicants believe that the combination of the *Lofgren*, *Rhoads*, and *Jain* patents fails to disclose or suggest the exemplary embodiment recited in Applicant's claims.

The *Lofgren* patent discloses an image measurement system and method that produces a digital watermark for an image. As shown in Figure 1, an image is communicated to a receiving or ground station where a watermark is embedded in the image to produce a watermarked image. The digital watermark includes a watermark identifier composed of plural bit data. The digital watermark can include image information such as metadata, related files, comments, file history, edit history, and/or security clearance information.

The *Rhoads* patent is directed to a digital watermarking technique in which a master model of satellite images is stored in a database. When a new satellite image is received, a portion of the master model is retrieved from the database, and a projective image is formed from the retrieved portion. The projective image is correlated with the satellite image. Once the satellite image is geo-referenced to the master model, the data represented in the master model is refined. See *Rhoads*, col. 4, line 22 through col. 5, line 19.

The Examiner alleges that the *Rhoads* patent remedies the deficiencies of the *Lofgren* patent as it relates to Applicants' claimed superimposing feature. The *Rhoads* patent discloses that the projective image is correlated to a portion of the master satellite image by "sliding one map over the other until the best registration between the two images is obtained" (emphasis added). *Id.*, col. 4, lines 61-63.

The correlation operation does not involve just "sliding one image over the other" but rather involves the more complex operation of transforming the satellite image to correspond to the reference system used in the master image, and then refining the data represented in the master image. Id., col. 5, lines 10-14. This refining includes discarding and/or not adding portions of the satellite image to the master image, or assigning various weights to portions of the satellite image so that these portions have more or less impact on the master image. Id., col. 5, lines 26-48.

In contrast, the claimed embodiment a modified video frame is superimposed onto a terrain map. The modified video frame does not have the same image data as the terrain map. For example, the modified video frame can include a target, or object of interest in a desired geo-location, and the terrain map a representation of the elevation and contour of the terrain in the desired geo-location. Superimposing the modified video frame onto the terrain map involves placing the modified video frame on top of the terrain map, where no registration or transformation operations are involved.

The "correlation" of the satellite image and the projective image as described in the *Rhoads* patent is not analogous to Applicants' claimed (i.e., changed, updated) superimposing operation, since, in the *Rhoads* patent, the projective image correlation operation involves refining based on the content of the satellite image.

The Examiner applies the *Jain* patent in an effort to remedy the deficiencies of the *Lofgren* and *Rhoads* patents with respect to "outputting at least one frame in the stream of superimposed modified video frames based on the inserted geo-location data", as recited in Applicants' claims. While the *Jain* patent is directed to a method

of cataloging and retrieving cataloged video data, this reference does not remedy the deficiencies of the *Lofgren* and *Rhoads* patents with respect to Applicants' claimed "superimposing at least one of the modified video frames onto a terrain map of a region of interest wherein objects within the at least one modified video frame are portrayed on a corresponding geo-location in the terrain map".

Because the combination of the *Lofgren*, *Rhoads*, and *Jain* patents does not disclose every element recited in independent claims 1 and 20 a *prima facie* case of obviousness has not been established.

In numbered paragraph 4 on page 8 of the Office Action, claims 21 and 22 stand rejected under 35 U.S.C. §103(a) for alleged unpatentability over the *Lofgren* patent in view of the *Rhoads* patent and the *Jain* patent, and further in view of *Josypenko* (U.S. Patent No. 6,288,686). Applicants respectfully traverse this rejection.

Claims 21 and 22 depend from independent claims 20. By virtue of this dependency and because of the additional features recited therein, Applicants submit that these claims are distinguishable over the prior art combination as alleged. In particular, the *Josypenko* patent fails to remedy the deficiencies of the *Lofgren*, *Rhoads*, and *Jain* patents as it concerns "superimposing at least one of the modified video frames onto a terrain map of a region of interest wherein objects within the at least one modified video frame are portrayed on a corresponding geo-location in the terrain map", as recited in claim 20. Withdrawal of this rejection is therefore deemed appropriate.